

Financial Aid Data:

Bridge No. 05655

Seeking Fed.
per Willy Wiley

Federal Reimbursement: (Limited to qualifying bridges – See Appendix I)

Total Estimated Project Cost multiplied by 80%:

Project Reimbursement Request \$ 960,960

~~State Reimbursement request (20%) = \$240,240~~

State Local Bridge Project Grant: (Cannot be combined with Federal reimbursement)

Allowable Grant Percentage 20% of Total Cost.

Project Grant Request \$ ~~240,240~~

State Local Bridge Project Loan: (Maximum 50% of total project cost)

Project Loan Request \$ XXX

Schedule: (Anticipated Dates)

Public Hearing Conducted: October, 2005

Design Completion: January, 2007

Property Acquisition Completion: N/A

Utilities Coordination Completion: January, 2007

Construction Advertising: March, 2007

Supplemental Application Submission: June, 2007

Start of Construction: June, 2007

Completion of Construction: December, 2007

I hereby certify that the above is accurate and true, to the best of my knowledge and belief.

Signature: 
(Chief Elected Official, Town Manager, or other Officer Duly Authorized)

Date: May 19, 05

Return completed applications to: Mr. Stanley C. Juber
Administrator of the Local Bridge Program
Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, Connecticut 06131-7546

**REPLACEMENT OF ASPETUCK RIDGE ROAD BRIDGE
OVER WEST ASPETUCK RIVER
BRIDGE NO. 05655
NEW MILFORD, CONNECTICUT**

Existing Condition:

Aspetuck Ridge Road (formerly known as Aspetuck Road) is a local major access (collector) road in the Town of New Milford. The road carries local vehicular traffic including school buses and commercial trucks. Average Daily Traffic (ADT 2001) is 1250 of which 2% is trucks.

The Aspetuck Ridge Road Bridge (No. 05655) was constructed in 1981. The bridge is a single span structure with a maximum span of 37' and total length of structure 41'. The bridge has a roadway width of 24'-1" between curbs and carries two lanes of traffic. The bridge is located in the middle of a reverse horizontal curve and has a skew of 30 degrees.

The bridge superstructure consists of concrete deck slab supported on closely spaced steel stringers (9 stringers) with concrete wearing surface. Corrugated metal stay-in-place forms were used to construct the deck slab. The railings are of extruded aluminum single rail type mounted on concrete parapets. The substructure consists of cast-in-place concrete. Foundation type is not known but is believed of spread footing type on rock. The bridge is in poor condition and requires rehabilitation. There is evidence of some scour at the abutment.

Proposed Rehabilitation:

Aspetuck Ridge Road is considered a major east-west connector to reduce congestion on Route 202. The Town is interested in making necessary improvements including horizontal alignment adjacent to the bridge to make the facility safe for the traveling public. The bridge needs to be re-aligned and widened. The following scope of rehabilitation is proposed.

- Remove the existing structure in its entirety.
- Construct approximately 56' span bridge using prestressed concrete deck units. The substructure will include conventional concrete abutments and U-Type wingwalls.
- The curb to curb width shall be 32'.
- Construct concrete parapets without railings. Stained concrete form liners will be used on exposed concrete surfaces.
- Reconstruct approach roadways, approximately 1000' to match the bridge.
- Install RB 350 guiderail within the project limits.

Estimated Construction Cost:

Removal of Superstructure	L. S.	\$ 40,000
Removal of Existing Masonry	250 C. Y. @ \$100	\$ 25,000
Structure Excavation	1400 C. Y. @ \$15	\$ 21,000
Handling Water	L. S.	\$ 50,000
Precast Conc. Arch- 36' span	504 L. F. @ \$350	\$176,400
Class 'A' Concrete	400 C. Y. @ \$450	\$180,000
Deformed Steel Bars	30,000 LB @ \$1.50	\$ 45,000
Pervious Structure Backfill	460 C. Y. @ \$35	\$ 16,100
Concrete Form Liner	1600 S.F. @ \$25	\$ 40,000
Roadway Items (1000L. F.)	L. S.	\$150,000
Minor Items	L. S. (10%)	\$ 74,500
Mobilization	L. S. (6%)	\$ 40,000

Total Construction Cost \$858,000

✓ ✓

Connecticut Department of Transportation
Bridge Safety & Evaluation
Bridge Inspection Report Cover Sheet
Form BRI-1

Bridge 05655 *Ridge*
ASPETUCK ROAD

over

WEST ASPETUCK RIVER

in

NEW MILFORD

Inspected on 12/18/2002

Inspected by Team 6

Structure No.	05655	Town	NEW MILFORD
Inspection Date	12/18/2002	Inspectors	Team 6

TABLE OF CONTENTS

Loose Forms (not bound in report)

	Number of Sheets Enclosed
Maintenance Memo	0
Flagging Memos	0
PONTIS Element Data Collection Form	1 ✓
Plan Sheets	0

Already on file ☐

Bound Report Pages

Title Cover Sheet	1 ✓
Table of Contents	1 ✓
Executive Summary	0
Field Notes	2 ✓
Calculations:	0
Load Rating Evaluation	0
Quantities & Cost Estimate	0
Photo Sheets	5 ✓
Photo Images	10 ✓

Forms

BRI-10, Concrete Deterioration Worksheet	1 ✓
BRI-18, Bridge Inspection Form	4 ✓
BRI-19, Highway Bridge Inventory Form	2 ✓

Comments:

THE CHANNEL WAS PARTIALLY ICE COVERED.

Bridge Number **05655**

Inspector By: L. Murphy & A. McAlone

Sufficiency Rating **77.94**
Previous Inspection Date **01/25/2001**

BS&E Received ☒ Data Entry By: bmw
Copies Made ☒ Data Entry Date: 2-27-03

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION
STRUCTURE EVALUATION
SHEET 1 OF 2 FORM BRI-19 REV 10/00

SHEET 1 OF 10 (INSP. REPORT)

90) Inspection Date 1/21/802	Inspection Team 606	91) Frequency 24	Class 01
Indepth Insp 10/07/1996	Deck Survey	Access 0	Flagman 0
CRITICAL FEATURE INSPECTIONS			
Type	Frequency	Team	Date
Fracture:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uwater:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RED FLAG

IDENTIFICATION

Bridge Name **NEW MILFORD** Town Code **52630**

5) Inventory Route:
A) Record Type **1** B) Signing Prefix **5** City Street ☐
C) Level of Service **0** None of the bel ☐
D) Route Number **00000** E) Directional Suffix **0** NA ☐

6) Feature Intersected **WEST ASPETUCK RIVER**

7) Facility Carried: **ASPETUCK ROAD**

9) Location **ASPETUCK RD O/ASPETUCK RV**
-50 MI. NORTH OF BOARDMAN

11) Milepoint **0.26** Miles

16) Latitude **41 deg 35 min 18 sec** deg min sec

17) Longitude **73 deg 25 min 30.00 sec** deg min sec

98) Border Bridge:
A) State Code ☐ B) Percent Responsibility ☐ % ☐
C) Border Town Name ☐

99) Border Bridge Structure No ☐

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:
A) Material **3** Steel ☐ B) Design Type **2** Stringer/Multi-beam ☐

44) Structure Type, Approach:
A) Material **0** Other ☐ B) Design Type **0** Other ☐

45) Number of Spans, Main Unit **1**

46) Number of Approach Spans **0**

107) Deck Structure Type **1** Concrete Cast-in-Place

108) Wearing Surface/Protective System:
A) Type of Wearing Surface **1** Monolithic Concrete ☐
B) Type of Membrane **0** None ☐
C) Type of Deck Protection **0** None ☐

AGE AND SERVICE

27) Year Built **1981** 106) Year Reconstructed **0000**

42) Type of Service:
A) On **1** Highway ☐ B) Under **5** WATERWAY ☐

28) Number of Lanes:
A) On **2** B) Under **0**

29) Average Daily Traffic **1250** Half ADT?: **No**

109) Percent Truck **2** %

30) Year of ADT **2001**

19) Bypass, Detour Length **2** miles

GEOMETRIC DATA

48) Length of Max Span **37** ft

49) Structure Length **41** ft

50) Curb or Sidewalk Widths:
A) Left **0.0** ft B) Right **0.0** ft

51) Brg Rdwy width, curb-curb **24.1** ft

52) Deck Width, Out-Out **26.5** ft

32) Approach Roadway Width **24** ft

33) Bridge Median **0** No Median

Deck Area **1087** sqft

34) Skew Angle **30** deg

35) Structure Flared **0**

10) Inv. Rte. Min. Vert Clearance **99** ft **99** in

47) Log Inv. Rte. Total Horiz Clr.: **24.1** ft

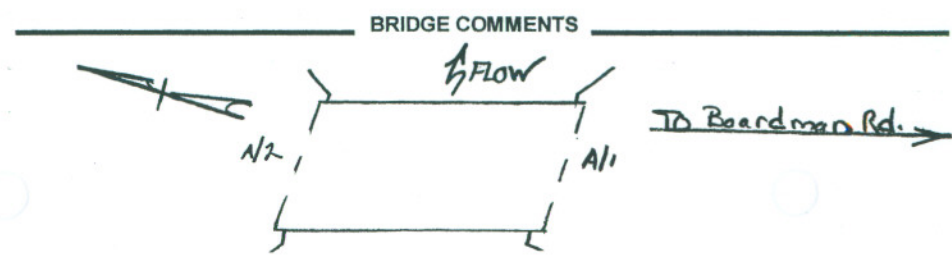
47) RLog Inv. Rte. Total Horiz. Clr.: **ft**

53) Min Vert Clearance Over Bridge **99** ft **99** in

54) Min Vert Under Clearance **N** Ref **0** ft **0** in

55) Min Lat Under Clearance on Right **N** Ref **99.9** ft

56) Min Lat Under Clearance on Left **0.0** ft



CLASSIFICATION	
112) NBIS Bridge Length	Yes
104) Highway System	0 Off System
26) Functional Class	19 Urban Local
100) Defense Highway	0 Not Defense Highway
101) Parallel Structure	N No parallel structure exists
102) Direction of Traffic	2 2-way traffic
103) Temporary Structure	
110) Designated National Network	0 Not on national network
20) Toll	3 On Free Road
21) Maintain	3 Town or Township Highway Agency
22) Owner	3 Town or Township Highway Agency
Report Class	L LOCAL
37) Historical Significance	5 Bridge is not eligible for National Register

WATERWAY	
DrainageBasinCode	6500
38) Navigation Control	0 No navigation control on waterway
39) Navigation Vert Clr.	0
116) Vert-Lift Brg Nav Min	
111) Pier Abutment Protection	
40) Navigation Horiz Clr.	0

PROPOSED IMPROVEMENTS	
75A) Type of Work Proposed	
75B) Work Done By	
76) Length of Struct. Improvement	ft
94) Bridge Improvement Cost	\$
95) Roadway Improvement Cost	\$
96) Total Project Cost	\$
97) Year of Improvement Cost Est.	
114) Future ADT	
115) Year Future ADT	
List No.	Project No.
	Advertised

POSTED SIGNS & UTILITIES	
Other Posted Signs 1	
Other Posted Signs 2	
Actual P.L. Single Unit Truck	tons
Rec. P.L. Single Unit Truck	tons
Actual P.L. Semi-Trailer Truck	tons
Rec. P.L. Semi-Trailer Truck	tons
Rec. P.L. All Vehicles	tons
Posted Vert Clearance On Bridge	0 ft 0 in
Posted Vert Under Clearance	0 ft 0 in
Posted Speed Limit	mph
Utility	

STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRI-19 REV 10/00

SHEET 2 OF 10 (INSP. REPORT)

Inspected By:

L. Murphy

D. McAlister

LOAD RATING AND POSTING

31) Design Load
63) Operating Rating Type
64) Operating Rating
65) Inventory Rating Type
66) Inventory Rating

0
1
49.0
1
29.0

Evaluation Code
Year of Evaluation
70) Bridge Posting
41) Structure Status
Open, no restriction

L
1998
5
A

CONDITION

58) Deck
59) Superstructure
60) Substructure
61) Channel & Chan. Protection
62) Culverts

Rating By
4
7
7
7
N

APPRAISALS

67) Structure Evaluation
68) Deck Geometry
69) Under Clear Vert & Horiz
71) Waterway Adequacy
72) Approach Rdwy Alignment
113) Scour Critical

Rating By
6
4
N
6
8
5

Items 58 Thru 72 Checked By:

36) Traffic Safety Features:

A) Bridge Railings
B) Transitions
C) Approach Guardrail
D) Approach Guardrail End

0
0
1
0

OTHER FEATURES

Fence Required
Fence Present
Fence Height
Fence Type
Fence Material
Fence Top Type

No
No
0.0 ft
0
0
0

Barrel Ladder
Stand Pipes
Cat Walks
Movable Inspection System
Loose Concrete Checked?

No
No
No
No
No

INSPECTION COMMENTS

Proposed Next Indepth Insp Year

2006

Senior
Supervisor

yongpravatc
sarshoryaa

REVIEWED BY:

Chi Y

Date

12-24-03

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Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 05655

INSPECTION DATE: 12/18/2002

INSPECTION TYPE: Routine **PREVIOUS INSPECTION DATE:** 1/25/2001 **SNOOPER REQUIRED:** No
INSPECTION PERFORMED BY: Team 6 **SNOOPER USED:** No

TOWN: NEW MILFORD **FEATURE CARRIED:** ASPETUCK ROAD **YEAR BUILT:** 1981
LOCATION: ASPETUCK RD O/ASPETUC **FEATURE INTERSECTED:** WEST ASPETUCK RIVER **YEAR REBUILT:** 0
MAIN MATERIAL: Steel **MAIN DESIGN:** Stringer/Multi-beam or Girde

INSPECTION VISITS:

Inspection Date: 12/18/2002 **Start Time:** 9:30 AM
Temperature: 30 ° F **End Time:** 10:20 AM

INSPECTORS:

Inspector: T. Murphy **Task:** routine inspection
Inspector: D. McClave **Task:** "

58. DECK

REINFORCED CONCRETE DECK (BARE)

OVERALL RATING 4

RATING

OVERLAY	N	BARE DECK- CONCRETE-
DECK STR. CONDITION	4	TOP- PLOW SCRAPES AT BOTH DECK ENDS WITH BITUMINOUS PATCH AREAS, RANDOM AREAS OF LIGHT TO MEDIUM SCALE. RANDOM HOLLOW AREAS IN DECK WITH TRANSVERSE CRACKS WHICH ARE SPACED 18 INCHES APART. SOME RANDOM CRACKS SHOW SMALL RUST STAINS. ALSO SOME RANDOM SPALLED AREAS. 20 PERCENT OF THE TOP IS SPALLED AND DELAMINATED. (SEE PHOTO AND BRI-10) BOTTOM -STAY IN PLACE FORMS WITH 1 1/2 INCH BY 6 INCH CORRUGATIONS ARE IN GOOD CONDITION, THERE IS RUST AROUND DRAIN PIPES.
CURBS	7	CONCRETE- SMALL SURFACE SPALLS AND SCRAPES, PARTIAL SNOW COVER AT THIS TIME.
MEDIAN	N	
SIDEWALKS	N	
PARAPET	7	CONCRETE - 8 INCH THICK, VERTICAL HAIRLINE CRACKS, SMALL SURFACE SPALL AT WEST SIDE, EAST SIDE SHOWS SHALLOW EXPOSED REBAR NEAR NORTH END. THE SOUTH END OF THE WEST PARAPET IS CRACKED AND SPALLED.
RAILING	8	(SINGLE ALUMINUM EXTRUDED RAIL)- DENTS, NICKS AND SCRAPES ON TAPERED SECTION AT THE SOUTHWEST CORNER.
PAINT	N	
FENCE	N	
DRAINS	8	4 INCH DIAMETER P.V.C PIPES THRU BAYS # 1 AND 8.
LIGHTING STANDARD	N	
UTILITIES TYPE/SIZE	N	
CONSTRUCTION JOINTS	N	
EXPANSION JOINTS	N	

59. SUPERSTRUCTURE

STEEL ROLLED BEAMS

OVERALL RATING 6

RATING

BEARING DEVICES	7	STEEL PLATES- MEDIUM TO HEAVY SPOT RUST AND PEELING PAINT.
STRINGERS	6	ROLLED BEAMS- MEDIUM TO HEAVY SPOT RUST AND PEELING PAINT ESPECIALLY AT BOTTOM FLANGES. WEBS OF FASCIAS BEAMS HAVE MEDIUM TO HEAVY SPOT RUST AND PEELING PAINT. BEAMS MEASURE 18 1/2 INCHES DEEP BY 7 5/8 INCH WIDE. BEAM # 9 HAS HEAVY RUST FULL LENGTH WITH SOME AREAS OF FLAKING LAMINAR RUST NEAR DECK DRAINS.

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Connecticut Department of Transportation

Bridge Inspection Report BRI-18

BRIDGE #: **05655**

INSPECTION DATE:

12/18/2002

59. SUPERSTRUCTURE

STEEL ROLLED BEAMS

OVERALL RATING **6**

GIRDERS	N	
FLOOR BEAMS	N	
TRUSSES-GENERAL	N	
TRUSSES-PORTALS	N	
TRUSSES-BRACING	6	STEEL ANGLE IRON IS WELDED TO WEBS OF STRINGERS. SLOPPY WELDS, SOME ARE LOCATED AT BASE OF WEBS.
PAINT	3	SEE ITEMS ABOVE
RUST	6	SEE ITEMS ABOVE
MACHINERY MOV SPAN	N	
RIVETS & BOLTS	7	ANCHOR BOLTS HAVE MEDIUM SPOT RUST.
WELDS & CRACKS	7	SEE BRACING, NO COVERPLATES. NO END DIAPHRAGMS.
TIMBER DECAY	N	
CONCRETE CRACKING	N	
COLLISION DAMAGE	N	
MEMBER ALIGNMENT	7	ALL BEAMS HAVE SLIGHT NEGATIVE CHAMBER.
DEFLECT. UNDER LOAD	N	
VIBR. UNDER LOAD	N	
STAND PIPES	N	
BARREL LADDERS	N	

ARE BARREL LADDERS OSHA COMPLIANT? ☐

60. SUBSTRUCTURE

CONCRETE

OVERALL RATING **7**

	RATING	
ABUTMENTS-STEM	7	(CONCRETE)- MINOR HONEYCOMB. 3 FORM TIE WIRES PROTRUDE FROM STEM AT EAST END OF ABUTMENT # 1. ABUTMENT # 2 SHALLOW REBAR UNDER BEAM # 2.
ABUTMENTS-BACKWALL	7	CONCRETE- MINOR HONEYCOMB, SOME FORM BOARDS LEFT ON TOP OF BACKWALLS.
ABUTMENTS-FOOTINGS	7	THE FOOTING AT ABUTMENT # 2 IS EXPOSED 6 FEET LONG UPTO 12 INCHES HIGH AND 36 INCHES WIDE NEAR THE CENTER OF THE STEM. (THE VELOCITY OF FLOW IS INCREASED AT THIS LOCATION DUE TO A <u>BEAVER DAM UNDER</u> STRUCTURE. (SEE PHOTO)
ABUT.-SETTLEMENT	8	
ABUTMENTS-WINGWALLS	8	
PIERS/BENTS-CAPS	N	
PIERS/BENTS-PILE BENT	N	
PIERS/BENTS-COLUMN	N	
PIERS/BENTS-FOOTINGS	N	
PIERS/BENTS-SETTLEMENT	N	
EROSION-SCOUR	8	

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Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: **05655**

INSPECTION DATE:

12/18/2002

30. SUBSTRUCTURE	CONCRETE	OVERALL RATING	7
CONCRETE CRACK-SPALL	7	SEE ITEMS ABOVE.	
STEEL CORROSION	N		
PAINT	N		
TIMBER DECAY	N		
COLLISION DAMAGE	N		
DEBRIS	7	STICKS AND DRIFT DEBRIS ON SEAT AT ABUTMENT # 1.	

61. CHANNEL PROTECTION		OVERALL RATING	7
	RATING		
CHANNEL SCOUR	6	THERE IS ONE ISOLATED AREA OF FOOTING EXPOSED AT ABUTMENT # 2 NEAR CENTER OF STEM THE FOOTING IS EXPOSED 6 FEET LONG BY 36 INCHES WIDE BY UPTO 12 INCHES HIGH.	
EMBANKMENT EROSION	7	BANKS SHOW SLOUGHING DOWNSTREAM.	
DEBRIS	6	STICKS LEAVES AND DEBRIS FORM A DAM ACROSS CHANNEL BETWEEN ABUTMENTS UNDER STRUCTURE. ICE COVER MAKES IT DIFFICULT TO DETERMINE IF IT IS A BEAVER DAM.	
VEGETATION	7	MINOR BRUSH GROWTH	
CHANNEL CHANGE	8		
FENDER SYSTEM	N		
SPUR DIKES & JETTIES	N		
RIP RAP	8	FEW LARGE STONES PLACED IN FRONT OF ABUTMENT STEMS.	

62. CULVERTS & RETAINING WALL		OVERALL RATING	N
------------------------------------------	--	-----------------------	----------

APPROACH CONDITION		OVERALL RATING	6
	RATING		
APPROACH SLAB	N	NOT VISIBLE	
RELIEF JOINTS	N		
APPROACH GUIDE RAIL	7	METAL BEAM RAIL- MINOR DAMAGE AT SOUTHWEST AND NORTHEAST CORNERS [SCRAPES]. A FEW SECTIONS OF RAIL ARE DENTED AT TOP.	
APPROACH PAVEMENT	5	(BITUMINOUS CONCRETE)- EXTENSIVE PATTERN CRACKS ,LONGITUDINAL AND TRANSVERSE CRACKS , BITUMINOUS PATCH AREAS ALONG SHOULDERS.	
APPROACH EMBANKMENT	6	PAVED DITCH AT SOUTHWEST , THERE 12 INCH DIAMETER SINK HOLE 24 INCHS DEEP AT EDGE OF PAVEMENT THE SOUTH END OF PAVEMENT IS UNDERMINED 10 INCHS DEEP NOT VISIBLE AT THIS TIME SNOW COVER RATING BASED ON LAST REPORT.	
TRAFFIC SAFETY FEATURES:			
BRIDGE RAILINGS	0		
TRANSITIONS	0		
APPROACH GUARDRAILS	1		
PPR. GUARDRAIL ENDS	0		

LOAD POSTING

6 of 10

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: **05655**

INSPECTION DATE:

12/18/2002

SINGLE UNIT (TONS)	<input type="checkbox"/>	
HS (TONS)	<input type="checkbox"/>	
4 AXLE (TONS)	<input type="checkbox"/>	
3S2 (TONS)	<input type="checkbox"/>	
ADVANCE WARNING Y/N	<input type="checkbox"/>	
LEGIBILITY	<input type="checkbox"/>	
VISIBILITY/LOCATION	<input type="checkbox"/>	

MISC.

MIN VERT. UNDERCLR.	<input type="text" value="0"/>	<input type="text" value="0"/>	"	
POSTED CLR. UNDER BRIDGE	<input type="text" value="0"/>	<input type="text" value="0"/>	"	
POSTED CLR. ON BRIDGE	<input type="text" value="0"/>	<input type="text" value="0"/>	"	
ADVANCE WARNING (Y/N)	<input type="text" value="No"/>			
SPEED LIMIT (IF ANY)	<input type="text"/>	MPH		
CHARACTER OF TRAFFIC				

ADDITIONAL NOTES

LIGHT TRAFFIC. DIGITAL PHOTOS WERE TAKEN. A CHANNEL CROSS SECTION WAS DONE AT INLET.

ADDITIONAL COMMENTS:

Inspectors' Signatures:

1)	<u>Thomas A. Murphy</u>	Date: <u>12/18/02</u>
2)	<u>Armenian McClave</u>	Date: <u>12/18/02</u>
3)	_____	Date: <u>__/__/__</u>
4)	_____	Date: <u>__/__/__</u>

P.E. Signature:

P.E.#:

Date: __/__/__

Reviewed by:

CDOT

Date: 2-24-03